

495D EXCAVATOR

26,184 lb (11 877 kg)

Transport Height.....	7 ft 5 in. (2.25 m)
Transport Length.....	23 ft 3 in. (7.08 m)
Machine Width	9 ft 6 in. (2.89 m)

ENGINEJohn Deere 300 Series

Number of Cylinders and Displacement4 cylinders, 276 cu in. (4.5 L)

Air Intake System.....Turbocharged

Bore and Stroke4.19 x 5.00 in. (106.4 x 127 mm)

Compression Ratio17.2 to 1

Net hp:

At 2100 rpm (Dig Mode)95 SAE hp (71 kW)

At 2300 rpm (Travel Mode).....100 SAE hp (75 kW)

Maximum Torque at 1300 rpm.....284 lb·ft (385 N·m)

Nozzle Opening Pressure:

New3820 ± 40 psi (26 340 ± 275 kPa)

Used3620 ± 40 psi (25 000 ± 275 kPa)

Valve Clearance (Cold):

Intake.....0.014 in. (0.36 mm)

Exhaust0.018 in. (0.46 mm)

Oil Pressure at Fast Idle50 ± 15 psi (345 ± 100 kPa)

Static Injection Pump Static Timing.....Line on governor weight retainer aligned with line on cam ring with No. 1 piston at TDC

Dynamic Injection Pump Timing at

Rated Load rpm*:

4276D:

Dig ModeNA

Travel Mode.....16 + 0 - 1° BTDC

4045D:

Dig ModeNA

Travel Mode.....16 + 0 - 1° BTDC

Speeds:

Slow Idle.....1000 ± 25 rpm

Fast Idle (Propel Mode).....2475—2500 rpm

Rated Full Load (Dig Mode)2300 + 25 - 50 rpm

Rated Full Load (Travel Mode).....2300 rpm

Turbocharged Boost Pressure

at Rated Full Load

(Minimum w/4045T Metric Engine).....9 psi (62 kPa)

Cylinder Pressure (Compression Min).....350 psi (2415 kPa)

Number of Flywheel Teeth129

Electrical System24 volt

Alternator42 amp

Cooling System Pressure10 psi (69 kPa)

Note: *For latest information, see Dealer Technical Assistance Center (DTAC) Solution K000413.

POWER TRAIN

TransmissionConstant mesh with high and low speed ranges.
Pressurized lubrication system.

Travel Motor.....A bent axis, axial piston variable displacement motor.

Travel BrakeAir over hydraulic shoe type brakes in each wheel.

Park BrakeAir actuated drum type on transmission output shaft.

HYDRAULIC SYSTEM—Open-Center

Main Pump:

Type.....	2 variable-displacement axial-piston
System Pressure—Travel.....	4620 ± 150 psi (31 855 ± 1035 kPa)
System Pressure—Digging	4050 ± 150 psi (27,925 ± 1035 kPa)
Minimum Flow	28 gpm (106 L/min) used at 2500 psi (17237 kPa) and 2200 rpm

Steering Pump:

Type.....	Gear
System Pressure	1775 ± 25 psi (12 300 ± 175 kPa) at fast idle
System Crossover Relief Valve	2465 psi (17 000 kPa)
Minimum Flow	5.7 gpm (21.64 L/min) used at 1775 psi (12 300 kPa) and 2100 rpm

Pilot Pump:

Type.....	Gear
System Pressure	640 ± 70 psi (4410 ± 480 kPa) at fast idle
Minimum Flow	5.5 gpm (20.8 L/min) at 2200 rpm

RELIEF VALVE SETTINGS

Boom I (Head and Rod) Front Pump	4260 + 140 - 0 psi (29 372 + 965 - 0 kPa)
Arm I (Head and Rod) Rear Pump	4260 + 140 - 0 psi (29 372 + 965 - 0 kPa)
Bucket (Head and Rod) Front Pump	4770 + 140 - 0 psi (32 888 + 965 - 0 kPa)
Rear or Blade Stabilizer (Head and Rod) Rear Pump.....	4260 + 140 - 0 psi (32 888 + 965 - 0 kPa)
Swing Brake Valve Circuit Relief Valve Left and Right (Crossover Relief) Rear Pump.....	3340 ± 140 psi (23 030 ± 965 kPa)

CYCLE TIMES (At Fast Idle)

Function	New Machine	Max Allowable
Boom Raise	2.7 ± 0.3 sec	3.5 sec
Boom Lower	2.3 ± 9.3 sec	3.0 sec
Arm Out	2.1 ± 0.3 sec	2.8 sec
Arm In	3.3 ± 0.4 sec	4.2 sec
Bucket Roll-Out	2.2 ± 0.3 sec	2.9 sec
Bucket Roll-In	3.6 ± 0.3 sec	4.5 sec
Swing (3 Revolutions).....	12.5 ± 1.0 sec	16.2 sec
Stabilizer Extend.....	1.54 ± 0.3 sec	2 sec
Stabilizer Retract.....	1.41 ± 0.3 sec	1.83 sec

LUBRICANTS

See front of this book for the codes [].

CAPACITIES	U.S.	Metric
Fuel Tank	66 gal	250 L
Cooling System	22 qt	21 L
Engine Oil w/ Filter [E]:		
(S.N. —137161).....	15 qt	14.2 L
(S.N. 137162—).....	13 qt	13 L
Hydraulic System [C]	19 gal	72 L
Swing Gear (See Operators Manual)	20 lb	9 kg
Swing Gearbox [J]	3.4 qt	3.2 L
Transmission [J].....	5.3 qt	5.0 L
Front Axle Case [J]	6.4 qt	6.0 L
Rear Axle Case [J].....	9.0 qt	8.5 L
Hub Reduction Case (Each) [J]	1.6 qt	1.5 L

PNEUMATIC SYSTEM

Governor Cut-In Pressure.....	94 psi (648 kPa)
Air System Priority Pressure Setting.....	46.4 psi (320 kPa)